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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,909

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Alister Peter Reid

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CARSTENS & CAHOON, LLP
P O BOX 802334
DALLAS, TX 75380

EXAMINER

CUOMO, PETER M

ART UNIT

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3634

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,909	REID, ALISTER PETER	
	Examiner	Art Unit	
	Andrea L. Coulter	3634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 26-28,35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25,29-34 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-18, 34 and 35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Page 12 of the specification describes how the latch mechanism 14 is to be actuated, but it is still not readily apparent to the examiner how the latch 14 is intended to be disabled. The drawings show no way of moving the latch 14. How is the latch 14 to be depressed? Into what aperture or recess is it to move? Where is the biasing element mentioned in the specification? Where do the actuating arms attach to the latch? How do they retract the latch mechanism? How do they release the latch mechanism?

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the elements that

actuate the latch 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 9, 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over De La Cerda (US 5,992,096) in view of Harris (US 4,893,952).

De La Cerda discloses a pet door comprising a pivotably mounted flap 8, a latch mechanism (18 and 20) that can bar the flap from moving in both directions, and a control mechanism (12, 22 and 27) for disabling the latch mechanism. The latch mechanism is located between the front and back sides of the flap, so that the latch does not extend out either way. The control mechanism is located above the door flap on one side, as are the electrical components of the control system. The pet wears a key 24 that emits a coded signal that unlatches the flap.

De La Cerda fails to disclose the control mechanism as being an infrared radiation detector. However, Harris teaches using an infrared radiation in a system to determine whether something has approached a door. The infrared radiation detector is located above the door, depends downwardly into an upper edge of the opening, has a conical infrared radiation receiving zone "A" with a beam angle of 60 degrees.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda with the infrared radiation used in the invention of Harris, because an infrared radiation detector is simply another type of signal. If infrared signals were used with the invention of De La Cerda, it would be obvious that those signals would be coded as in De La Cerda, since the invention of De La Cerda is meant to only let certain animals through the pet door. It would be further obvious to mount the electrical components of the control system and the infrared radiation detector to a common circuit board, since both system and detector are located in the same place.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over De La Cerda in view of Harris, and further in view of Kornbrekke (US 4,698,937). All of the elements of the instant application are discussed above except that De La Cerda fails to disclose the beam angle. However, Kornbrekke teaches an infrared beam angle of 80 degrees, which is about 90 degrees. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda in view of Harris with the beam angle of Kornbrekke, since the wide angle provides a receiving zone wide enough to interact with any infrared transmission in the area.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over De La Cerda in view of Harris, and further in view of Miconi (US 5,946,855). All of the elements of the instant application are discussed above except that De La Cerda fails to disclose that the control system includes an actuator motor. However, Miconi teaches using an actuator motor 66 to operate elements of a pet door 50. The motor is activated by an infrared sensor 68. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda with the actuator motor of Miconi, since motors provide a reliable way to operate latches and doors without requiring manual activation.

Claims 12-14 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over De La Cerda in view of Harris, and further in view of Engle (US application 2002/0110373). All of the elements of the instant application are discussed above

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except that De La Cerda fails to disclose an attenuating device for ambient infrared radiation. However, Engle teaches using a filter 35 made of an infrared absorbing material to permit transmission therethrough of only a selected range of wavelengths. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda with the attenuating device of Engle, since without an attenuating device the pet door might open due to ambient radiation when the pet is not even present, which would leave the door open to other animals or intruders.

Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over De La Cerda in view of Harris, and further in view of Green (US 4,776,133). All of the elements of the instant application are discussed above except that De La Cerda fails to disclose the pet flap being substantially transparent to infrared radiation. However, Green teaches using a clear pet flap 14 in a pet door. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda with the clear flap of Green, since a substantially transparent flap allows infrared radiation to pass through and be received by an infrared radiation detector, and also allows the pet to see through the door.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over De La Cerda in view of Harris, and further in view of Green and Miconi. All of the elements of the instant application are discussed above. Harris teaches using infrared radiation,

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Green teaches using a clear pet flap, and Miconi teaches using a motor to move elements of a pet door.

Claims 19, 20, 22, 23 and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable by Deighton (US 5,791,172) in view of De La Cerda. Deighton discloses a key 74 that could be adapted to be fitted to a pet collar. The key has a window that is substantially transparent to infrared radiation and contains an infrared radiation transmitter, a control circuit and a battery, as described in column 4 of the specification. The key housing, shown in figure 8, includes a handle with an opening to receive a suspension element therethrough. The key is adapted to be suspended by the handle at an angle, can be adapted to fix a rigid suspension element at a selected angle, and sends out an infrared beam with a beam axis at an angle. The key hangs under its own weight. The control circuit is adapted to cause periodic transmission of a coded infrared signal from the infrared radiation transmitter.

Deighton fails to specify that the key depends downwardly from a pet collar or the beam angle of the infrared transmission. However, De La Cerda teaches using a key on a pet collar, shown in Figure 5, and also teaches a beam angle of 60 degrees. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the key of Deighton with the pet collar and beam angle of De La Cerda, since the pet collar is a secure, easy way to attach the key to a pet, and since a 60 degree angle provides a wide transmission area to lessen the chance that the pet will not be standing in the correct location to interact with the infrared receiver. In addition, it is clear from figure 5

of De La Cerda that the key is inclined at an angle of approximately 45 degrees from the horizontal, and implies that the signal is inherently directed out from the end, at approximately that 45 degree angle. At any rate, it would have been obvious to one of ordinary skill in the art at the time of the invention to direct the signal from the end of the key where the window is; this is shown by Deighton.

Claims 21 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deighton in view of De La Cerda and further in view of Harris. All of the elements of the instant application are discussed above.

Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deighton in view of De La Cerda and Kornbrekke (US 4,565,029). All of the elements of the instant application are discussed above except that Deighton fails to disclose the beam angle's total angular extent. However, Kornbrekke teaches an angular extent of 20 degrees, which is about 24 degrees. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the key of Deighton with the beam angle of Kornbrekke, since a small angle allows the key to interact with the receiver only when intended to; it keeps the pet door from opening whenever the pet is just walking nearby.

The references thus read on the claims.

Response to Arguments

The objection the drawings stands, since the applicant has not revised the drawings to show how the latch 14 is moved. Applicant misunderstood to which latch the examiner was referring.

Similarly, the rejection under 35 U.S.C. 112, first paragraph, is still valid due to the same misunderstanding.

The applicant's arguments concerning claims 1-7, 9, 10 and 15 were fully considered, but were not considered persuasive. In response to applicant's argument that the receiving zone is "adapted to detect a modulated and encoded infrared radiation signal", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

With respect to the applicant's assertion that "one skilled in the art would have no motivation to combine the teachings of De La Cerda with the teachings of Harris", this is incorrect. The use of infrared signaling and detection for the purpose of opening or closing doors is well known in the art, both with passive infrared such as in automatic supermarket doors or with encoded infrared such as key fobs to allow access to certain apartment buildings. In addition, it appears that the applicant has misunderstood the examiner. The rejection does not aim to replace the entire verification system of De La Cerda with the passive sensor of Harris. The teachings of Harris in this respect merely

illustrate that infrared signals are well established in the door-control art. In light of Harris, it would have been obvious to one of ordinary skill in the art to provide the coded signal of De La Cerda in an infrared format, thus making it a coded infrared signaling system.

With respect to claim 8, applicant asserts that there is no motivation to combine the teachings of De La Cerda with those of Harris. That issue has been resolved above. Applicant also asserts that there is no motivation to combine Kornbrekke with De La Cerda. However, the combination of Kornbrekke with De La Cerda is meant to illustrate that a beam angle of about 90 degrees is well known in the art. The reference is applicable and effectively teaches a beam angle; it would have been obvious to one of ordinary skill in the art to use the beam angle taught by Kornbrekke.

With respect to claim 11, applicant asserts that there is no motivation to combine the teachings of De La Cerda with those of Harris. That issue has been resolved above. Applicant also asserts that combining Miconi with De La Cerda and Harris does not yield the applicant's invention. However, Miconi clearly teaches the use of motors to operate elements of a door. The use of motors to operate latches and doors is well known in the art, and it would have been obvious to one of ordinary skill in the art to have provided the invention of De La Cerda with motors to operate elements of the door, including the latch, without requiring manual input.

With respect to claims 12-14, applicant asserts that there is no motivation to combine the teachings of De La Cerda with those of Harris. That issue has been resolved above. In addition, in response to applicant's argument that the examiner's

conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Applicant asserts that neither Harris nor De La Cerda suggest an optical filter, and further asserts that the Engle patent is related to a field of endeavor wholly unrelated to that of the instant application. However, Engle does teach that an optical filter is beneficial for filtering out certain ranges of signals; furthermore, the Engle reference is related to the transmission and reception of signals, which is clearly related to the Harris and De La Cerda references. Thus, the combination is proper.

With respect to claims 16 and 18, the applicant asserts that there is no motivation to combine the teachings of De La Cerda with those of Harris. That issue has been resolved above. Applicant further argues that the teaching of transparent material for the flap in Green is superfluous both because the transparent flap would "serve no useful purpose with regards to the Green invention", and because Green does not specifically disclose the reason for the transparency as that it would allow infrared radiation to pass through. However, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In addition, the

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applicant states in the arguments (page 19) that such a transparent flap in the Green patent would "allow the pet to see into or out of the door," which would indeed be a useful purpose.

With respect to claim 17, the applicant asserts that there is no motivation to combine the teachings of De La Cerda and Harris. That issue has been resolved above. Applicant further argues that combining Miconi with De La Cerda and Harris does not arrive at the applicant's invention. This issue has also been resolved above.

Applicant's arguments with respect to claims 19, 20 and 22-33 have been considered but are moot in view of the new ground(s) of rejection. However, the applicant should note that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

With respect to claims 21 and 34, the applicant asserts that there is no motivation to combine Deighton with De La Cerda or Harris, because they relate to different fields of endeavor. However, all three references deal with controlling elements through signal generation and reception. The applicant further states that a device using manual inputs would have no bearing on the instant application; it appears that the applicant's arguments are more limiting than the claims.

Claim 37 was considered and is discussed above.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea L. Coulter whose telephone number is (571) 272-1679. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571)272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrea L. Coulter
Patent Examiner



Jerry Redman
Primary Examiner